

Dr. Rajan Kumar

Contact Information

Village - Sakrapar, Post-Deoria, Distt. -Deoria
274001, (Uttar Pradesh)
Mobile no: 8707768475, 8948162828
E-mail: rajan.cool042@gmail.com



Current Position of Employment

Current/ Present Post: Assistant Professor
Department of Electronics and Communication Engineering
KIPM-College of Engineering & Technology, Gorakhpur, (U.P.), India.

Carrer Objective:

Intend to build a career with leading organization of hi-tech environment with committed & dedicated people, which will help me to explore myself fully and realize my potential. Willing to work as a key player in challenging & creative environment.

Educational/Professional Qualification:

Course	Institute	Board/University	Year of Passing
Doctor of Philosophy (Ph.D.)	MMM University of Technology, Gorakhpur, (U. P.)	MMM University of Technology, Gorakhpur, (U. P.)	25-08 -2024
M. Tech. (Power Electronics & Drives)	MMM University of Technology, Gorakhpur, (U. P.)	MMM University of Technology, Gorakhpur, (U. P.)	2017
B.Tech. (Electrical & Electronics Engineering)	Pranveer Singh Institute of Technology, Bhauti, Kanpur, (U. P.)	U. P. Technical University Lucknow, (U. P.)	2010
Intermediate	Sewa Smiti Vidya Mandir Inter College, Allahabad (U. P.)	U. P. Board Allahabad, (U. P.)	2004
High School	Maharaja Agrasen Inter College, Deoria (U. P.)	U. P. Board Allahabad, (U. P.)	2001

Research Profile:

- Doctor of Philosophy (Ph.D.)**

Thesis Topic: Automatic Generation Control in Smart Grid

Ph.D. Supervisor: (Prof.) Dr. L. B. Prasad, Dept. of Electrical Engg., M.M.M. University of Technology Gorakhpur, (U.P.), India.

- M. Tech.**

Thesis Topic: Performance Analysis, and Improvement of power Transmission line Network Using Unified Power Flow Controller

M. Tech. Supervisor: (Prof.) Dr. S. K. Srivastava, Dept. of Electrical Engg., M.M.M. University of Technology Gorakhpur, (U.P.), India.

- B. Tech.**

Thesis Topic: Torque Ripple Minimization of Switched Reluctance Motor Drives Using PID Controller

B. Tech. Supervisor: Mr. Sudhir Kumar Singha, Dept. of Electrical & Electronics Engg., Pranveer Singh Institute of Technology, Bhauti, Kanpur, (U. P.), India.

Other Qualification:

- GATE 2014 Qualified (Gate Score 253)

Professional experience:

S. No.	Position Held	Organization	Duration
1.	Site Engineer	Medhaj Techno Concept Pvt. Ltd. Lucknow (U. P.)	16 March, 2011 to 15 May 2012, (One Year)
2.	Research Cum Teaching Fellow (TEQIP-III)	Madan Mohan Malaviya University of Technology, Gorakhpur, (U. P.), India.	24 July, 2017 to 23 July 2021 (4 Years Research and Teaching Experience)
3.	Guest Faculty (EE)	Madan Mohan Malaviya University of Technology, Gorakhpur, (U. P.), India	2, September 2023 to 26, July 2024.
4.	Guest Faculty (EE)	Madan Mohan Malaviya University of Technology, Gorakhpur, (U. P.), India	27, July 2024 to 12, June 2025.
5.	Guest Faculty (EE)	Madan Mohan Malaviya University of Technology, Gorakhpur, (U. P.), India	18, July 2025 to 19.09.205
6.	Assistant Professor (ECE)	KIPM-College of Engineering & Technology, Gorakhpur, (U.P.), India.	20.09.2025 to till Date

Industrial Training:

- Four weeks training in “220KV Distribution Substation”, Naubasta Kanpur (UP).

Current Areas of interest /Research:

- Power & Energy System Control
- Intelligent Techniques & Control
- Optimization Techniques
- Hybrid Power System
- Renewable Energy

Subjects taught:

UG Level:

- Basic Electrical Engineering
- Network analysis and Synthesis
- Control Systems
- Power Quality
- Basic Electrical Machines and Protective Equipment
- Non-Conventional Energy Resources

PG Level

- Electric Drive

Lab Handled

- Control System Lab
- Basic Electrical Engineering Lab
- Power Electronics Lab
- Machines Lab
- Drives Lab
- Switchgear and Protection Lab
- Microprocessor and Microcontroller
- Circuit Lab

- Electrical Measurement Lab

Reviewer of Publications:

- **International Conferences**

1. **Reviewer** for International Conference on Energy Transition and Innovations in Green Technology (ICETIGT-2024), Jointly organized by Madan Mohan Malaviya University of Technology, Gorakhpur (U.P.), India and Asian Institute of Technology, Bangkok, Thailand, held during September 27-28, 2024 at MMMUT, Gorakhpur (U.P.), India.

Publications

Article Published in International Journals (4):

1. **Rajan Kumar** and L. B. Prasad “A Comparative Performance Analysis of Frequency Stabilization Schemes for Multi-Area Multi-Source Deregulated Power System” Energy Systems (Springer), SCImago, Web of Science, Published on Date - 21 March 2022, 1-29, <https://doi.org/10.1007/s12667-022-00504-9>, ISSN: 1868-3975 (Electronic), and 1868-3967 (Print), (Published online first articles on 21 March 2022), pp. 963–991, **Impact Factor: 2.3(Q2)**.
2. **Rajan Kumar** and L. B. Prasad “Optimal Load Frequency Control of Multi-Area Multi-Source Deregulated Power System with Electric Vehicles Using Teaching Learning-Based Optimization: A Comparative Efficacy Analysis”, Electrical Engineering (Springer), SCIE, Published on Date 05 October 2023, <https://doi.org/10.1007/s00202-023-02027-7>, ISSN: 1432-0487, pp. 1865–1893, **Impact Factor: 1.8(Q2)**.
3. **Rajan Kumar** and L. B. Prasad “Application of teaching learning-based optimization for optimal automatic generation control of interconnected multi-area multi-source hybrid power system with demand response contribution”, International Journal of Ambient Energy (Taylor & Francis), SCImago, **Q1, accepted on date 31-Jul-2025**.
4. Sant Ranjan, **Rajan Kumar** and S. K. Srivastava “Enhancement of Power Quality in Wind farm System Comparison STATCOM and UPFC”, International Journal of Advanced Electrical and Electronics Engineering (IJAE) ISSN: 2278-8948 Paper ID: IJAE-APL17-009, 2017, Vol. 6, Issue 3, **Impact Factor: 1.45**.

Article Under Review in International Journals (1):

1. L. B. Prasad and **Rajan Kumar** “An Optimal Load Frequency Regulation Scheme for Multi-Area Multi-Source Hybrid Power System with Renewables Using Mayfly Optimization Algorithm”, **Q1 (Revision Submitted)**.

International Conferences:

1. **Rajan Kumar** and Lal Bahadur Prasad “Performance Analysis of Automatic Generation Control of Multi-Area Restructured Power System” 2021 IEEE First International Conference on Advances in Electrical, Computing, Communications and Sustainable Technologies (ICAECT 2021) to be held at Shri Shankaracharya Technical Campus (SSTC), Bhilai, Chhattisgarh, India during 19-20, February 2021. ISBN: 978-1-7281-5791-7 (IEEE Xplore) and 978-1-7281-5790-0 (Print), (IEEE Xplore), <https://doi.org/10.1109/ICAECT49130.2021.9392417>.
2. L. B. Prasad and **Rajan Kumar** “An Optimal Load Frequency Regulation Scheme for Isolated Multi-Source Hybrid Power System with Renewables Using Mayfly Optimization Algorithm”, 2024 IEEE Third International Conference on Power Electronics, Intelligent Control and Energy Systems (ICPEICES), Delhi, India, 26-28 April 2024, ISBN:979-8-3503-8719-3(IEEE Xplore), pp.382-387, <https://doi.org/10.1109/ICPEICES62430.2024.10719288>.
3. Arpit Yadav, L. B. Prasad, **Rajan Kumar** “A Survey on Application of Computational Technique for Two Area Interconnected Automatic Generation Control in Power System Using PSO-PID” 2025 IEEE International Students' Conference on Electrical, Electronics and Computer Science (SCEECS- 2025), Bhopal, India, 18-19 January 2025, 02 April 2025, ISBN:979-8-3315-2983-3 (IEEE Xplore), pp. 1-5, <https://doi.org/10.1109/SCEECS64059.2025.10940160>.

National Conferences:

1. **Rajan Kumar** and L. B. Prasad “Smart Grid Technology: A Review in Indian Perspective”, Recent Advances in Electrical and Electronics Engineering Proceedings of the National Conference on Recent Advances in Electrical and Electronics Engineering (RAEEE-2018), MMMUT, Gorakhpur, India, ISBN: 978-93-86724-91-5, pp. 74-77, 16-17 March 2018.
2. **Rajan Kumar** and S. K. Srivastava “A Review on Power Flow Control using FACTS Devices”, Electrical Power Technology, Management, and IT Applications (EPTMITA-16), MMMUT, Gorakhpur, India, 23-24, September 2016.

FDP/STC/Workshop/Volunteer committee/ Seminar Certificate:

1. AICTE Training and Learning (ATAL) Academy Online FDP on “Control Systems & Sensors Technology” from 2020-10-17 to 2020-10-21 at Madan Mohan Malaviya University of Technology Gorakhpur, (U. P.), India.

2. Online Faculty Development Program on “Recent Trends in Intelligent Control Techniques for Renewable Energy Systems and Electric Vehicles”, held during October 12-16, 2020, at Department of Electrical Engineering, National Institute of Technology Hamirpur, Himachal Pradesh, India.
3. Online Faculty Development Program on, “Power Electronics for Electric Vehicles and Energy Systems” held during 28 September- 3 October 2020, at Department of Madan Mohan Malaviya University of Technology Gorakhpur, India.
4. Online Faculty Development Program on “AI and Data Analytics Applications in Power Systems”, held during June 03-07, 2024, at Department of Electrical Engineering, National Institute of Technology Hamirpur, Himachal Pradesh, India.
5. Online Faculty Development Program on “Opportunities and Applications of Artificial Intelligence in Electrical Engineering”, held during May 06-10, 2024, at Department of Electrical Engineering, National Institute of Technology Hamirpur, Himachal Pradesh, India.
6. Online Workshop on “Smart Cities and Intelligent Systems” held during January 03-07, 2022, at Department of Electrical Engineering, National Institute of Technology Hamirpur, Himachal Pradesh, India.
7. Five-day on-line workshop on “Fuzzy Logic Systems in Engineering Applications (FLSEA 21)” organized by the Department of Electrical and Electronics Engineering in association with Mechanical Engineering, Computer Science and Engineering, National Institute of Technology Sikkim in collaboration with TEQIP-III, during March 15-19, 2021.
8. “International Workshop on Energy Management in Smart Sustainable Cities” 30th November –1st December 2019 at Madan Mohan Malaviya University of Technology Gorakhpur, U. P., India.
9. Madan Mohan Malaviya University of Technology Gorakhpur, India, his outstanding contribution as **Volunteer** committee in 2018 5th IEEE Uttar Pradesh Section International Conference on Electrical, Electronics and Computer Engineering (UPCON 2018).
10. Madan Mohan Malaviya University of Technology Gorakhpur, India, his outstanding contribution as **Volunteer** committee in IEEE Region 10 International Workshop on Panel of Conference Organizers (POCO-2019) Organized at Madan Mohan Malaviya University of Technology Gorakhpur, U. P., India, September 25, 2019.
11. Madan Mohan Malaviya University of Technology Gorakhpur, India, his outstanding contribution as **Volunteer** committee in ICE3 2020, “International Conference on Electrical and Electronics Engineering (ICE3 2020)”.

Software and other Proficiency:

1. MATLAB Software
2. Knowledge of C-language
3. Microsoft Word
4. PowerPoint Presentation
5. Microsoft Excel

Google Scholar Citations:

1. Google Scholar link: <https://scholar.google.com/citations?user=LWTql-cAAAAJ&hl=en>, Citations: 23, h-index: 3. i10-index:1
2. Shodh Ganga Thesis link: <http://hdl.handle.net/10603/586009>.

Declaration:

I hereby declare that the information furnished above is true to the best of my Knowledge.

Date: 05/11/2025

Place: Gorakhpur (U. P.)

RAJAN KUMAR